

FORM PTO-1590
(REV. 11-2000)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER

3535-0114P

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

09/936493

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371

INTERNATIONAL APPLICATION NO.

INTERNATIONAL FILING DATE

PRIORITY DATE CLAIMED

PCT/IS00/00003

March 10, 2000

March 11, 1999

TITLE OF INVENTION

DEVICE FOR CARRYING A CHILD

APPLICANT(S) FOR DO/EO/US

GUDMUNDSSON, Larus Jon

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39 (1).
4. ☒ The US has been elected by the expiration of 19 months from the priority date (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
 - a. ☒ is transmitted herewith (required only if not transmitted by the International Bureau). WO 00/53060
 - b. ☒ has been transmitted by the International Bureau.
 - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
 - a. ☐ is transmitted herewith.
 - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4)
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)).
 - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☐ have been transmitted by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☒ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11. to 20. below concern document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98-1449 and International Search Report (PCT/ISA/210)
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A **FIRST** preliminary amendment.
14. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
15. ☐ A substitute specification.
16. ☐ A change of power of attorney and/or address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821-1.825.
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20. ☒ Other items or information:
 - 1.) PCT Request (PCT/RO/101)
 - 2.) PCT Substitute Claims Letter w/ International Preliminary Examination Report (PCT/IPEA/409) and amended claims
 - 3.) Two (2) sheets of Formal Drawings

U.S. APPLICATION NO. of known, see 37 CFR 1.53		INTERNATIONAL APPLICATION NO		ATTORNEY'S DOCKET NUMBER	
NEW 36493		PCT/IS00/00003		3535-0114P	
21. <input checked="" type="checkbox"/> The following fees are submitted: BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(5)): Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO. \$1,000.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO \$860.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO. \$710.00 International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) \$690.00 International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) \$100.00 ENTER APPROPRIATE BASIC FEE AMOUNT =				CALCULATIONS PTO USE ONLY	
				\$	1000.00
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input checked="" type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	130.00
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total Claims	6 - 20 =	0	X \$18.00	\$	0
Independent Claims	1 - 3 =	0	X \$80.00	\$	0
MULTIPLE DEPENDENT CLAIM(S) (if applicable) None			+ \$270.00	\$	0
TOTAL OF ABOVE CALCULATIONS =				\$	1130.00
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$	-565.00
SUBTOTAL =				\$	565.00
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	0
TOTAL NATIONAL FEE =				\$	565.00
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +				\$	0
TOTAL FEES ENCLOSED =				\$	565.00
				Amount to be:	
				refunded	\$
				charged	\$

- a. ☒ A check in the amount of \$ **565.00** to cover the above fees is enclosed.
- b. ☐ Please charge my Deposit Account. No. _____ in the amount of \$ _____ to cover the above fees.
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 02-2448.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

Send all correspondence to:

Birch, Stewart, Kolasch & Birch, LLP or Customer No. 2292
 P.O. Box 747
 Falls Church, VA 22040-0747
 (703)205-8000

Date: September 11, 2001

By  #32,334
 Joe McKinney Muncy, #32,334

09/936493

JCC3 Rec'd PCT/STO 11 SEP 2001

PATENT
3535-0114P

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: GUDMUNDSSON, Larus Jon Conf.:
Int'l. Appl. No.: PCT/IS00/00003
Appl. No.: New Group:
Filed: September 11, 2001 Examiner:
For: DEVICE FOR CARRYING A CHILD

PRELIMINARY AMENDMENT

BOX PATENT APPLICATION

Assistant Commissioner for Patents
Washington, DC 20231

September 11, 2001

Sir:

The following Preliminary Amendments and Remarks are respectfully submitted in connection with the above-identified application.

AMENDMENTS

IN THE SPECIFICATION:

Please amend the specification as follows:

Before line 1, insert --This application is the national phase under 35 U.S.C. § 371 of PCT International Application No. PCT/IS00/00003 which has an International filing date of March 10, 2000, which designated the United States of America and was published in English.--

IN THE CLAIMS:

Please amend the claims as follows:

4. (Amended) Device according to claim 1, wherein in that the inclination of the seat section being about 4 - 10° with respect to horizontal plane.

6. (Amended) Device according to claim 1, wherein in that the inner part (5) of the seat section (21) is semi-circular and at least partly encircles the neck of the adult.

REMARKS

The specification has been amended to provide a cross-reference to the previously filed International Application. The claims have also been amended to delete multiple dependencies and to place the application into better form for examination. Entry of the present amendment and favorable action on the above-identified application are earnestly solicited.

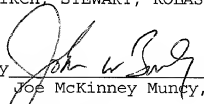
Attached hereto is a marked-up copy of the changes made to the application by this Amendment.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By

 #32,334

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KM/cqc
3535-0114P

Attachment: Version With Markings Showing Changes Made

(Rev. 01/22/01)

VERSION WITH MARKINGS SHOWING CHANGES MADE

The specification has been amended to provide cross-referencing to the International Application.

The claims have been amended as follows:

4. (Amended) Device according to claim 1, [2 or 3,] wherein in that the inclination of the seat section being about 4 - 10° with respect to horizontal plane.

6. (Amended) Device according to [any one of the claim 1 - 5] claim 1, wherein in that the inner part (5) of the seat section (21) is semi-circular and at least partly encircles the neck of the adult.

JC03 Rec'd PCT/PTO 11 SEP 2001

Device for carrying a child

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Technical field

The invention relates to a device for carrying a child in seated position upon the shoulders of an adult. The device comprises a seat section partly encircling the neck of the adult, and a leg section reaching down over the chest of the adult.

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Background Art

Children and infants are often carried by adults, normally their parents, where the child is seated upon the shoulders of the adult. The most common way of doing this is by the adult holding on to the child's hands or for an older child on to his feet. Numerous devices have been described whereby children can be carried by a large person such as parent or other adult. One type of carrier is designed to carry the child papoose-style on the back of the adult, employing devices similar to camper's backpacks. The papoose-style carrier is well suited for carrying infants for a relatively long period of time. For older children, who need to be carried for a shorter period of time or need a better viewing position, a shoulder-mounted carrier is preferable.

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In U.S. Patent No. 4,915,277 a holder with a saddle seat is positioned against the adult's upper thigh. In U.S. Patents No. 3,968,910, 4,416,403 and 4,484,700 a shoulder mounted seats for infants and children are described. The design enables the child to be seated upon the shoulder of the adult with his legs straddling the adult's neck and extending downwardly upon the chest region of the adult. Those seats are designed of collapsible structure enabling easy carrying when not in use. In U.S. Patent NO. 5,335,834 a carrying seat is introduced, comprising an integral inflatable structure fabricated of flexible polymeric sheet material. The carrying seat is made of a main portion of a horseshoe or U-shaped contour, having an

inflation valve, an arcuate rear region, opposed leg portions forwardly disposed from said rear region, and upper and lower surfaces. An abutment member is upwardly emergent from said upper surface in said region adjacent to said interior seam. The carrying seat is of substantially symmetrical shape with respect to plane orthogonal to said upper and lower surface and bisecting said rear portion in parallel relationship to said leg portions.

The design as introduced in U.S. Patent No. 5,335,834 is in many ways advantageous over its prior art, however there are still many disadvantages employed with its use. The two main disadvantages are that the seat section does not support the correct upright sitting posture of the child and secondly that the weight of the child is not correctly carried by the adult.

Extension of the lumbar spine is believed to be beneficial as compared to flexion of the lumbar spine as a result in lower intradiscal pressure. The natural upright curvature of the spine can only be adopted when the pelvis is in the neutral or slightly anterior tilted position. Research has indicated that forward inclination of seats between 4-10° (degrees) ensure adequate extension of the lumbar spine through anterior tilting of the pelvis. Furthermore, increased lumbar extension has as an added effect that the thoracic spine becomes more vertical which in turn can enhance breathing.

Disclosure of the Invention

The object of the invention is to provide a device for carrying a child in seated position upon the shoulder of an adult where a correct upright sitting position of the child is encouraged and the weight support of the adult is carried as correctly and ergonomically as possible by the adult.

The device according to the invention comprises a configuration for carrying a child upon the shoulder of an adult where a seat section partly encircles the neck of the adult and a leg section reaching down over the chest of the adult, characterized in said seat section being a cushion saddle and the leg

section having stirrups for the child's feet, said stirrups carrying at least partly the child's weight.

The invention is further unique according to the characteristic part of the patent claims 2-6.

Brief Description of the Drawings

The invention is explained in greater details below with reference to the accompanying drawings in which;

Figure 1 shows a front side view of the device,

Figure 2 shows a side view of the device,

Figure 3 shows a cross sectional cut A - A from fig. 1,

Figure 4 shows a child seated upon the shoulder of an adult using the shoulder seat device, and

Figure 5 shows a child seated upon the shoulder of an adult without the support of the device.

More detailed Description of the Drawings and one presently preferred exemplary embodiment of the Invention

The seat configuration as illustrated in figure 1 - 3 is comprised of an inflatable main portion (21), forming the seat for carrying the child. The main portion of the device or the so-called seat section (21) is preferably made of any kind of flexible sheet material. The material is preferably sewed and/or welded together to form an inflatable main portion. The seat section (21) has a horseshoe-like or semi-circular contour. The leg sections (22) extend from the non-inflatable end portion (7) of the seat section (21) and form a

kind of stirrups (12) for the child to place its feet in. The seat section's inner part (5) forms about or little more than $3/4$ of enclosed circle. Thereby the device partly encircles the neck of the adult when in use. The leg section is secured to the non-inflatable end portion (7) of the seat section by metal eye (8) where the upper strap (9) portion of the leg section is fastened to. The length of the leg section is adjustable by strap length adjuster's (10) allowing individual adjustments for the optimal comfort for the child and the adult carrying the child. A footrest or stirrups (12) are arranged at the end of the leg section. The stirrups are connected to the length adjuster's (10) by lower straps (11).

In figure 4 - 5 the sitting posture of a child seated upon the shoulder of an adult (25) is illustrated. In figure 4 the child (24) is supported by the cushion saddle seat (1) and is situated in a correct upright position with his back spine (26) as close as possible to a vertical alignment.

Figure 5 illustrates the typical sitting posture of a child (24) seated upon the shoulder of an adult (25) having no support. The child's back spine is curved and the sitting position is abnormal. The two figures illustrate clearly the difference in the sitting posture of a child with or without the aid of the cushion saddle seat. By using the device the sitting posture of the child (24) will be much more natural and ergonomic as well as it is much easier for the adult (25) to carry the child.

The invention described here above is not limited to precisely those details which have been specified, but can be elaborated upon in many ways without deviating from the central concept and spirit of the invention as defined in the patent claims below.

29-05-2001

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New set of amended Patent Claims (amendments to claim 1 made in accordance with response sent 8 March are made in bold)

1. A device for carrying a child (24) upon the shoulder of an adult (24), comprising; seat section (21) partly encircling the neck of the adult, and a leg section (22) reaching down over the chest of the adult, the seat section (21) being a cushion saddle (1) **characterised in that** the leg section (22) having stirrups (12) for the child's feet, said stirrups carrying at least partly the child's weight **and thereby enhancing the upright sitting posture of the child.**

2. Device according to claim 1, wherein the upper surface (1) of the seat section (21) being forwardly inclined with respect to horizontal plane.

3. Device according to claim 1, wherein in the thickness of the seat section is decreasing in direction toward the leg section (22).

4. Device according to claim 1, 2 or 3, wherein in that the inclination of the seat section being about 4 - 10° with respect to horizontal plane.

5. Device according to claim 1, wherein in that the leg section (22) length being adjustable.

6. Device according to any one of the claim 1 - 5, wherein in that the inner part (5) of the seat section (21) is semi-circular and at least partly encircle the neck of the adult.

Vonda M. Hallberg
Patent Counsel

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Fig. 1

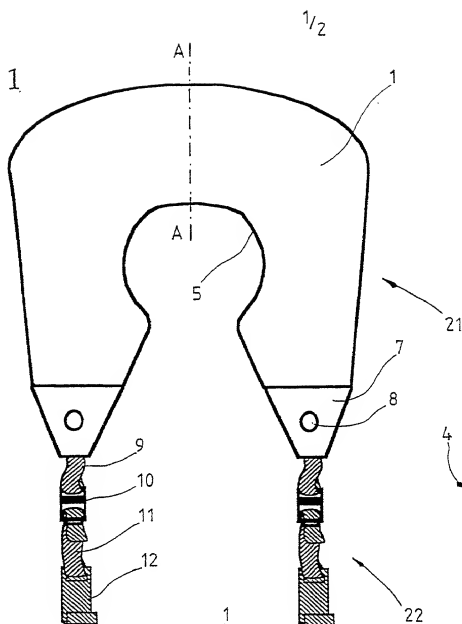


Fig. 3

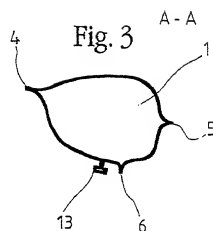


Fig. 2

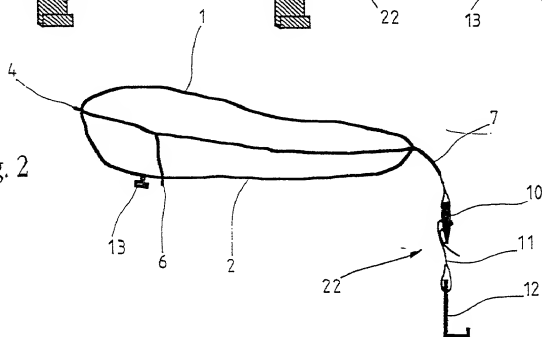


Fig 4

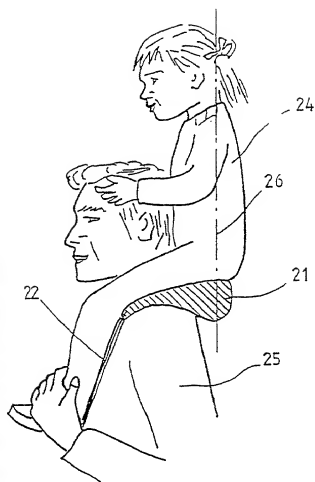
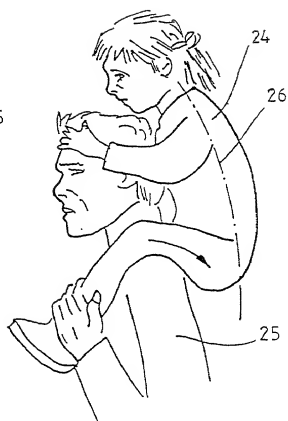


Fig 5



BIRCH, STEWART, KOLASCH & BIRCH, LLPP.O. Box 747 • Falls Church, Virginia 22040-0747
Telephone: (703) 205-8000 • Facsimile: (703) 205-8050PLEASE NOTE:
YOU MUST
COMPLETE THE
FOLLOWING**COMBINED DECLARATION AND POWER OF ATTORNEY
FOR PATENT AND DESIGN APPLICATIONS**

As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated next to my name; that I verily believe that I am the original, first and sole inventor (if only one inventor is named below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Insert Title:

DEVICE FOR CARRYING A CHILDFill in Appropriate
Information -
For Use Without
Specification
Attached:

the specification of which is attached hereto. If not attached hereto,

the specification was filed on September 11, 2001 _____ as

United States Application Number _____;

and amended on September 11, 2001 _____ (if applicable) and/orthe specification was filed on March 10, 2000 _____ as PCTInternational Application Number PCT/US00/00003 _____; and wasamended under PCT Article 34 on May 29, 2001 _____ (if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I do not know and do not believe the same was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representative or assigns more than twelve months (six months for designs) prior to this application, and that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns, except as follows.

I hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)**Priority Claimed**Insert Priority
Information:
(if appropriate)

4997

(Number)

Iceland

(Country)

March 11, 1999

(Month/Day/Year Filed)

☒☐

Yes

No

(Number)

(Country)

(Month/Day/Year Filed)

☐☐

Yes

No

(Number)

(Country)

(Month/Day/Year Filed)

☐☐

Yes

No

(Number)

(Country)

(Month/Day/Year Filed)

☐☐

Yes

No

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below.

Insert Provisional
Application(s):
(if any)

(Application Number)

(Filing Date)

(Application Number)

(Filing Date)

All Foreign Applications, if any, for any Patent or Inventor's Certificate Filed More than 12 Months (6 Months for Designs) Prior to the Filing Date of This Application:

Country

Application Number

Date of Filing (Month/Day/Year)

Insert Requested
Information:
(if appropriate)

I hereby claim the benefit under Title 35, United States Code, §120 of any United States and/or PCT application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States and/or PCT application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information which is material to the patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

Insert Prior U.S.
Application(s):
(if any)

(Application Number)

(Filing Date)

(Status - patented, pending, abandoned)

(Application Number)

(Filing Date)

(Status - patented, pending, abandoned)

I hereby appoint the following attorneys to prosecute this application and/or an international application based on this application and to transact all business in the Patent and Trademark Office connected therewith and in connection with the resulting patent based on instructions received from the entity who first sent the application papers to the attorneys identified below, unless the inventor(s) or assignee provides said attorneys with a written notice to the contrary:

Raymond C. Stewart	(Reg. No. 21,066)	Terrell C. Birch	(Reg. No. 19,382)
Joseph A. Kolasch	(Reg. No. 22,463)	James M. Slattery	(Reg. No. 28,380)
Bernard L. Sweeney	(Reg. No. 24,448)	Michael K. Mutter	(Reg. No. 29,680)
Charles Gorenstein	(Reg. No. 29,271)	Gerald M. Murphy, Jr.	(Reg. No. 28,977)
Leonard R. Svensson	(Reg. No. 30,330)	Terry L. Clark	(Reg. No. 32,644)
Andrew D. Meikle	(Reg. No. 32,868)	Marc S. Weiner	(Reg. No. 32,181)
Joe McKinney Muncy	(Reg. No. 32,334)	Donald J. Daley	(Reg. No. 34,313)
John W. Bailey	(Reg. No. 32,881)	John A. Castellano	(Reg. No. 35,094)
Gary D. Yacura	(Reg. No. 35,416)	Thomas S. Auchterlonie	(Reg. No. 37,275)
Mark J. Nuell	(Reg. No. 36,623)		

Send Correspondence to:

BIRCH, STEWART, KOLASCH & BIRCH, LLP

or

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Telephone: (703) 205-8000 • Facsimile: (703) 205-8050

**PLEASE NOTE:
YOU MUST
COMPLETE
THE
FOLLOWING:**

Full Name of First
Inventor
Inventor's Signature
Inventor's Date This
Document is Signed

Inventor's Residence
Inventor's Citizenship

Inventor's Post Office
Address

Full Name of Second
Inventor, if any:
see above

Full Name of Third
Inventor, if any:
see above

Full Name of Fourth
Inventor, if any:
see above

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

GIVEN NAME/FAMILY NAME Jarus Jon GUDMUNDSSON		INVENTOR'S SIGNATURE <i>[Signature]</i>	DATE* 22/11 2001
Residence (City, State & Country) Hafnarfjörður ICELAND		CITIZENSHIP Icelandic	
MAILING ADDRESS (Complete Street Address including City, State & Country) Gardavegi 4, 220 Hafnarfjörður ICELAND			
GIVEN NAME/FAMILY NAME		INVENTOR'S SIGNATURE	DATE*
Residence (City, State & Country)		CITIZENSHIP	
MAILING ADDRESS (Complete Street Address including City, State & Country)			
GIVEN NAME/FAMILY NAME		INVENTOR'S SIGNATURE	DATE*
Residence (City, State & Country)		CITIZENSHIP	
MAILING ADDRESS (Complete Street Address including City, State & Country)			
GIVEN NAME/FAMILY NAME		INVENTOR'S SIGNATURE	DATE*
Residence (City, State & Country)		CITIZENSHIP	
MAILING ADDRESS (Complete Street Address including City, State & Country)			